

memorandum

date August 13, 2009

to Chehalis River Basin Flood Authority

from ESA Adolfson Consulting Team and Board Advisory Committee

subject Discussions at the July 16, 2009 Authority Work Session

At the July 16, 2009 Flood Authority work session, the Flood Authority spent the morning discussing three general topics. These topics were introduced as questions for the Flood Authority to ponder and discuss. The desired outcome was for the Flood Authority to come to some general consensus for moving forward in allocating current funds and deciding what planning efforts and projects to pursue over the next year for the Flood Authority to be successful.

After a morning of lively debate and discussion the Flood Authority asked the ESA Adolfson to put together a memo summarizing what was discussed and bring it back to the August Flood Authority meeting. This memo is an attempt to meet that request.

We will discuss the memo at the August Flood Authority business meeting and the Flood Authority can decide if they think this memo represents the consensus of the group or if further clarification is needed. As discussed at the work session, this is a fluid process and there will be further discussions and refinements in the future. Given that caveat, the Flood Authority can use this memo as a basis for continuing to move forward with their work.

The Flood Authority was asked to address three issues to clarify the role of the Flood Authority and provide direction to ESA Adolfson. The three issues were:

1. Clarify the role the Flood Authority wants to take in funding projects.
 - How do you want to spend the money you have?
2. What does success look like over the next year?
 - What do you want ESA to do?
 - What do you want in the plan?
3. Do you like the process for gathering information and the process for making decisions leading to a basin-wide package?
 - Do you like the decision matrix and criteria used?

The Role of the Flood Authority

Clarify the role the Flood Authority wants to take in funding projects.

- *How do you want to spend the money you have?*

The role of the Flood Authority is a multi-year planning and implementation effort. Through the planning process and studies underway the Flood Authority would like to create a basin-wide package that has cost-effective, long-term, and environmentally responsible methods to protect human life, commercial enterprises, private property, and natural resources during flood events. (See attached diagram).

There are several broad efforts underway to accomplish this goal. They can generally be described as:

- A. Using a major portion of the \$2.5 million for Flood Authority staff support and expenses, ESA Adolfson, and ripe and ready studies and projects.
- B. Continuing examination of major projects including the Twin Cities Project and the Upstream Storage Project.
- C. Clarifying the basin-wide General Investigation (GI) to allow for analysis of several alternatives under the broad categories of flood mitigation and ecosystem restoration, leading to a comprehensive list of potential projects. The goal is not to foreclose any funding options for projects, whether the funding is federal, state, local, grant, etc.
- D. Keeping all of the local capitol projects in the plan so they can be considered for being part of the basin-wide package or being viable in the future with other funds and sponsors. Also it is important to keep local capitol projects in the plan and GI as they may be able to be used as match for the basin-wide package. Funding or technical assistance may become available for these local projects depending on whatever governance and finance structure the Flood Authority pursues in the future.

Next Steps:

- Analyze the current budget allotments and see if there are any available funds for one or two local projects as demonstration pilots.
- Run the local projects through the prioritization process to determine which might be appropriate to fund as a pilot out of the \$2.5 million.

Success Over the Next Year

What does success look like over the next year?

- *What do you want ESA Adolfson to do?*
- *What do you want in the Flood Plan?*

Over the next year, the planning process should describe and help facilitate the multi-year approach to flood mitigation. The plan must not only identify and prioritize projects for a basin-wide package that will reduce the risk of damage from flooding over time, it must also anticipate how the district could organize and fund projects in the future. To do so, a chapter on governance and finance will be added to

the Flood Plan this year. This will accomplish the direction in the interlocal agreement to help the Flood Authority analyze options as it moves to form a Flood District or some other form of governance.

The chapter will describe alternatives for governance and finance. This will assist the Flood Authority in:

- Education and information for citizens and the electorate.
- Illustrate alternative ways to fund and give technical assistance to listed projects.
- Explain alternative ways to organize across and within jurisdictions.
- Help manage expectations about local projects.

Next Step:

- ESA Adolfson will prepare a draft Governance and Finance chapter for the Flood Plan and present it to the Authority for consideration.

Project Prioritization Process

Do you like the process for gathering information and the process for making decisions leading to a basin-wide package?

- *Do you like the decision matrix and criteria used?*

The Flood Authority has asked ESA Adolfson to compile information about potential flood mitigation projects in the Chehalis Basin. In the draft Flood Plan, issued in June 2009, these projects have been divided into a short list of major regional basin-wide projects and two longer lists of nonstructural programmatic actions and smaller local capital projects. The Flood Authority has been working with the consultant to determine a process to prioritize these projects and make decisions about which projects to support.

Project Considerations

At the Flood Authority work session on May 21, ESA Adolfson presented the Flood Authority with a draft list of project considerations. The project considerations are questions that need to be answered in order to consider a project for funding or support. The Flood Authority discussed and edited the considerations at the May work session. The revised considerations are:

- **Definition of the Project.** Has the project been sufficiently defined and scoped to be considered and evaluated as a potential project by the Flood Authority? What is the intent of the project? Who will benefit?
- **Implementing Agency.** Is there an identified agency or jurisdiction who will take the lead on the project? Is there an identified agency or jurisdiction that will be in charge of maintenance on the project?
- **Ability to Meet Goals.** Does the project meet the goals outlined in the Chehalis River Basin Comprehensive Flood Hazard Management Plan?

- **Effectiveness of Mitigation.** What flood hazard problems does the project solve? Is it a permanent or temporary solution? Is it a complete or partial solution? How much of the basin would be affected? Has the project been evaluated downstream and upstream impacts (both positive and negative)?
- **Feasibility.** Are there technical obstacles that would prevent the project being constructed?
- **Cost and Funding Sources.** How expensive is the project and who will bear the cost? Are funding sources available, both in the short-term and long-term?
- **Cost-effectiveness.** How much benefit does the project deliver per dollar invested?
- **Environmental Impacts.** Does the project have significant environmental impacts or can adverse impacts be mitigated?
- **Permitting Ease.** What approvals or permits will be required? Are those approvals or permits likely to be granted?
- **Timeliness.** How long will it take to implement the project? Are there other projects that must be completed before this project can begin?
- **Acceptability.** Is the project acceptable to the stakeholders in the Chehalis basin?

Project Criteria

At the May 21 work session, the Flood Authority determined that they would like a numerical system to help rank projects. Based on this direction, ESA Adolfson translated the project considerations into criteria that can be used in numerical ranking system. These rankings would be one consideration used by the Flood Authority in determining which projects to support and fund.

Three of the project considerations are framed as yes or no questions. And the answer to all three questions needs to be yes, or the project is not ready to rank. The three questions are:

- **Is the project sufficiently defined?**
- **Is there an identified implementing agency or agencies?**
- **Is the timeline of the project acceptable to the Flood Authority?**

The other considerations are framed as criteria for which each project can be ranked high, medium, or low:

Criteria	Prioritization Ranking		
	LOW	MEDIUM	HIGH
Goals	Meets no/few goals	Sufficiently meets multiple goals	Meets most goals very well
Effectiveness of Mitigation	Not effective	Moderately effective	Very effective
Upstream and Downstream Impacts on People and Structures	Significant negative impact	Neither positive or negative impact	Positive impact
Technical Feasibility	Difficult to implement	Moderately able to implement	Easy to implement
Funding	Unlikely to be funded	Potential to be funded	Likely to be funded
Cost-Effectiveness	Benefits do not meet costs	Benefits meet or somewhat outweigh costs	Benefits significantly outweigh costs
Environmental Impact	Significant negative impact	Neither positive or negative impact	Positive impact
Permitting	Unlikely to be permitted	Unclear how likely to be permitted	Likely to be permitted
Acceptability	Unpopular/affects few	Not popular with some groups	Popular/affects many

The Flood Authority will be able to assign each criterion an individual weight given its relative importance (for example, the Flood Authority may feel that cost-effectiveness is more important than funding). Using a spreadsheet program, the high/medium/low rankings for each project can be calculated to determine a comparable final score for each project.

Next Step

- The Flood Authority agreed to use this process as a tool in the future when making decisions on which projects to fund and/or support.

Basin-Wide Package

